

Claims:

1. A distributed computer system comprising:
 - a first main system and a second main system, both to execute applications in cooperation with a human user; and
 - a service system to evaluate problems in the first and second main systems, the service system comprising a service module to collect problem related data from the main systems, an acquisition module to acquire knowledge representations, a knowledge module to store the knowledge representations, and an inference module for processing problem related data with knowledge representations to identify solutions, the inference module forwarding the solutions through the service module to the main systems.
2. The computer system of claim 1, wherein the first and second main systems have first and second auxiliary systems with auxiliary knowledge representations to evaluate problems in the main systems and to escalate problem evaluation to the service system.
3. The computer system of claim 2, wherein the knowledge representations in the service system are enhanced in comparison to the auxiliary knowledge representations in the first and second auxiliary systems.
4. The computer system of claim 3, wherein the knowledge representations are enhanced in volume, actuality and complexity.
5. The computer system of claim 2, wherein the first and second auxiliary systems forward problem data to the service system after preliminary data analysis by processing with the auxiliary knowledge representations.
6. The computer system of claim 2, wherein the service system updates the auxiliary knowledge representations in first and second auxiliary systems.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

7. The computer system of claim 2, wherein the first and second service systems each have a service module to collect problem related data from the main systems, an acquisition module to acquire knowledge representations, a knowledge module to store the knowledge representations, and an inference module for processing problem related data with knowledge representations to identify solutions, the inference module for selectively forwarding the solutions through the service module to the main systems and forwarding data to the service system.

8. The computer system of claim 1, wherein the inference module applies the knowledge representations for both main systems and distinguishes version differences of the main systems by looking up in a check lexicon.

9. A method for solving a problem in at least one main computer system by expert systems, comprising:

detecting the problem in the main system;
processing problem related data with a first set of knowledge representations of a first expert system to search for a solution;
depending on processing results, selectively solving the problem by the first expert system or forwarding the problem related data together with search results to a second expert system with a second set of knowledge representations;
processing the problem related data, the search results and the second set of knowledge representations by the second expert system to search for the solution; and
depending on processing results, selectively solving the problem by the second expert system or presenting search results of both searches and problem related data to a human.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

10. A computer program product comprising program code means for performing the method of claim 9 when the computer program product is run on a computer.
11. An inference module with expertise functionality for evaluating problems in first and second main computer systems that execute an application, wherein the inference module is adapted to process problem related data with knowledge representations to identify solutions, the inference module characterized in that the inference module is part of a service system that receives problem related data from the first and second main systems of different versions over a network, wherein the inference module applies the knowledge representations for both main systems and distinguishes version differences of the main systems by looking up in a check lexicon.
12. The computer system of claim 1, wherein at least one system executes an enterprise resource planning application.
13. The computer system of claim 1, wherein at least one system is implemented as an R/3 system.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com